UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/751,016	12/27/2000	Yehuda Feuerstein	MS1-722US	6189

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22801	7590	04/23/2004	CHAI; LONGBIT

LEE & HAYES PLLC
421 W RIVERSIDE AVENUE SUITE 500
SPOKANE, WA 99201

ART UNIT	PAPER NUMBER
2131	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/751,016	FEUERSTEIN ET AL.
	Examiner	Art Unit
	Longbit Chai	2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _08 October 2002_.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1 - 75_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _27 December 2000_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _3_.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

DETAILED ACTION

Priority

1.   No claim for priority has been made in this application.

2.   The effective filing date for the subject matter defined in the pending claims in

this application is 12/27/2000.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   Claim 1 – 8, 20 – 24, 33 – 36, 45 – 54, and 71 – 74 are rejected under 35

U.S.C. 102(e) as being anticipated by Farber (Patent Number: US 6415280 B1),

hereinafter referred to as Farber.

4.   As per claim 1, Farber discloses a network system comprising:

a.   a first device to maintain an original resource (Farber: inter alia, Column 43 Line

59 – 61);

b.   a second device to maintain a replica resource remotely from the first device, the

replica resource being replicated from the original resource (Farber: inter alia, Column

43 Line 59 – 61);

c.   memory to store a cached descriptor corresponding to the original resource

(Farber: inter alia, Column 12 Line 38 – 43, Column 3 Line 56 – 57, Column 39 Line 24

– 25 and Figure 1(b): Applicant defines a Descriptor can be a hash function of the

resource, a calculated checksum (CRC) or any other functional identifier that can be

formulated to provide a basis for comparison of different instantiations of a resource.

Farber teaches that a "True Name" of a data item (for example, files, database records

and the like) obtained by computing a MD, or a hash function, is virtually guaranteed to

represent the given data item and only that particular data item. Therefore, a True

Name is qualified as a Descriptor and both of them are served as resource unique

identifiers);

d.   a security component to determine whether the replica resource will pose a

security risk to the second device upon receipt of a request for the replica resource, the

security component (Farber: inter alia, Column 34 Line 45 – 49 and Column 43 Line 62

– 64):

e.   formulating a descriptor corresponding to the replica resource and comparing the

formulated descriptor with the cached descriptor (Farber: inter alia, Column 31 Line 27 –

30 and Column 37 Line 36 – 42); and

f.   if the formulated descriptor and the cached descriptor are not equivalent,

formulating a second descriptor corresponding to the original resource and comparing

the formulated descriptor with the second descriptor (Farber: inter alia, Column 3 Line 35 – 38 and Column 31 Line 31 – 33).

5.   As per claim 2, Farber teaches the claimed invention as described above (see claim 1). Farber further teaches the security component determines that the replica resource is not a security risk if the formulated descriptor and the cached descriptor are equivalent (Farber: inter alia, Column 37 Line 12 – 13 and Figure 28).

6.   As per claim 3, Farber teaches the claimed invention as described above (see claim 1). Farber further teaches if the formulated descriptor and the cached descriptor are not equivalent, and if the formulated descriptor and the second descriptor are equivalent, the security component determines that the replica resource is not a security risk (Farber: inter alia, Column 37 Line 13 – 14 Figure 28).

7.   As per claim 4, Farber teaches the claimed invention as described above (see claim 1). Farber further teaches if the formulated descriptor and the cached descriptor are not equivalent, and if the formulated descriptor and the second descriptor are equivalent, the security component determines that the replica resource is not a security risk, and the cached descriptor is replaced with the second descriptor (Farber: inter alia, Column 25 Line 57 – 61 and Column 37 Line 13 – 17).

8.   As per claim 5, Farber teaches the claimed invention as described above (see claim 1). Farber further teaches if the formulated descriptor and the cached descriptor are not equivalent, and if the formulated descriptor and the second descriptor are not equivalent, the security component determines that the replica resource is a security

risk, and the replica resource is replaced with a copy of the original resource (Farber: inter alia, Column 37 Line 51 – 52 and Column 31 Line 31 – 32).

9.   As per claim 6, Farber teaches the claimed invention as described above (see claim 1). Farber further teaches if the formulated descriptor and the cached descriptor are not equivalent, and if the formulated descriptor and the second descriptor are; not equivalent, the security component determines that the replica resource is a security risk, the replica resource is replaced with a copy of the original resource, and the cached descriptor is replaced with the second descriptor (Farber: inter alia, Column 37 Line 33 – 35).

10.   As per claim 7, Farber teaches the claimed invention as described above (see claim 1). Farber further teaches the security component formulates the cached descriptor when the original resource is replicated to create the replica resource (Farber: inter alia, Column 37 Line 33 – 35).

11.   As per claim 8, Farber teaches the claimed invention as described above (see claim 1). Farber further teaches the security component is configured to determine whether the request will pose a security risk to the second device (Farber: inter alia, Column 34 Line 48 – 50).

12.   As per claim 20, Farber discloses a network server comprising:

a.   a server component to receive a request for a resource maintained on the

network server and, in response to the request, implement security policies to prevent

unauthorized access to the resource (Farber: inter alia, Column 25 Line 26 – 28); and

b.   a security component that is registerable with the server component during

run-time to determine whether the resource will pose a security risk to the network

server upon receipt of the request (Farber: inter alia, Column 43 Line 62 – 63 and

Column 34 Line 45 – 49).

13.   As per claim 21, Farber teaches the claimed invention as described above (see

claim 20). Farber further teaches if the security component determines that the

resource will pose a security risk, the security component redirects the request to

indicate: that the resource is not available (Farber: inter alia, Column 25 Line 26 – 28).

14.   As per claim 22, Farber teaches the claimed invention as described above (see

claim 20). Farber further teaches:

a.   the security component: formulates a descriptor corresponding to the resource;

compares the formulated descriptor with a cached descriptor, the cached descriptor

corresponding to the resource and formulated when the resource is initially requested

(Farber: inter alia, Column 31 Line 27 – 30, Column 37 Line 36 – 42, Column 14 Line 26

– 30 and Column 3 Line 56 – 57); and

b.   determines that the resource is not a security risk if the formulated descriptor and

the cached descriptor are equivalent (Farber: inter alia, Column 37 Line 12 – 13 and

Figure 28).

15.   As per claim 23, Farber teaches the claimed invention as described above (see

claim 20). Farber further teaches:

a.   formulates a descriptor corresponding to the resource; compares the formulated

descriptor with a cached descriptor, the cached descriptor corresponding to the

resource and formulated when the resource is initially requested (Farber: inter alia,

Column 31 Line 27 – 30, Column 37 Line 36 – 42, and Column 14 Line 26 – 30);

b.   if the formulated descriptor and the cached descriptor are not equivalent,

formulates a second descriptor corresponding to an original resource maintained on a

file server remotely located from the network server, the resource being replicated from

the original resource (Farber: inter alia, Column 3 Line 35 – 38 and Column 31 Line 31

– 33);

c.   compares the formulated descriptor with the second descriptor; and determines

that the resource is not a security risk if the formulated descriptor and the second

descriptor are equivalent (Farber: inter alia, Column 37 Line 13 – 14 and Figure 28).

16.   As per claim 24, Farber teaches the claimed invention as described above (see

claim 20). Farber further teaches:

a.   formulates a descriptor corresponding to the resource; compares the formulated

descriptor with a cached descriptor, the cached descriptor corresponding to the

resource and formulated when the resource is initially requested (Farber: inter alia,

Column 31 Line 27 – 30, Column 37 Line 36 – 42, and Column 14 Line 26 – 30);

b.   if the formulated descriptor and the cached descriptor are not equivalent,

formulates a second descriptor corresponding to an original resource maintained on a

file server remotely located from the network server, the resource being replicated from

the original resource (Farber: inter alia, Column 3 Line 35 – 38 and Column 31 Line 31

– 33);

c.   compares the formulated descriptor with the second descriptor; if the formulated

descriptor and the second descriptor are not equivalent, initiates that the resource

stored on the network server be replaced with a copy of the original resource

maintained on the file server (Farber: inter alia, Column 37 Line 51 – 52 and Column 31

Line 31 – 32); and

d.   initiates that the cached descriptor be replaced with the second descriptor

(Farber: inter alia, Column 37 Line 33 – 35).

17.   As per claim 33, Farber discloses a computing device comprising an operating

system to:

a.   access resources to service requests (Farber, see inter alia, Column 43 Line 62

– 64);

b.   a security component to determine whether a resource will pose a security risk to

the computing device upon receipt of a request to access the resource (Farber, see

inter alia, Column 43 Line 62 – 64, Column 34 Line 45 – 50, and Column 31 Line 30);

c.   the security component configured to: formulate a descriptor corresponding to

the resource (Farber, see inter alia, Column 31 Line 27 – 30);

d.   retrieve a cached descriptor corresponding to the resource the cached descriptor

stored on a remote second computing device (Farber, see inter alia, Column Line 15 –

23 and Column 23 Line 41 – 43);

e.   compare the formulated descriptor with the cached descriptor (Farber, see inter

alia, Column 37 Line 36 – 42); and

f.   determine that the resource is not a security risk if the formulated descriptor and

the cached descriptor are equivalent (Farber, see inter alia, Column 37 Line 12 – 13

and Figure 28).

18.   As per claim 34, Farber teaches the claimed invention as described above (see

claim 33). Farber further teaches the security component formulates the cached

descriptor when the resource is initially requested (Farber, see inter alia, Column 14

Line 26 – 30 and Column 13 Line 56 – 57).

19.   As per claim 35, Farber teaches the claimed invention as described above (see

claim 33). Farber further teaches the security component initiates a remote data server

to formulate the cached descriptor and store the cached descriptor on the remote

second computing device when the resource is stored on the computing device (Farber,

see inter alia, Column 23 Line 15 – 23 and Column 23 Line 41 – 43: to retrieve and

store the cache descriptor can be considered as the dual services).

20.   As per claim 36, Farber teaches the claimed invention as described above (see

claim 33). Farber further teaches if the formulated descriptor and the cached descriptor

are not equivalent, the security component initiates that the resource be replaced with a

copy of the resource maintained on the remote second computing device (Farber, see inter alia, Column 25 Line 57 – 61 and Column 37 Line 13 – 17).

21.   As per claim 45, Farber discloses a method comprising:

a.   receiving a request for a replica resource stored on a computing device ((Farber, see inter alia, Column 43 Line 58 – 62);

b.   formulating a descriptor corresponding to the replica resource; comparing the formulated descriptor with a cached descriptor corresponding to an original resource stored on a second computing device remotely located from the computing device, the replica resource being replicated from the original resource (Farber, see inter alia, Column 31 Line 27 – 30 and Column 37 Line 36 – 42);

c.   determining that the replica resource does not pose a security risk if the formulated descriptor and the cached descriptor are equivalent (Farber, see inter alia, Column 37 Line 12 – 13 and Figure 28);

d.   if the formulated descriptor and the cached descriptor are not equivalent, formulating a second descriptor corresponding to the original resource; comparing the formulated descriptor with the second descriptor; and determining that the replica resource does not pose a security risk if the formulated descriptor and the second descriptor are equivalent (Farber, see inter alia, Column 37 Line 13 – 14 and Figure 28).

22.   As per claim 46, Farber teaches the claimed invention as described above (see claim 45). Farber further teaches allowing the request if said determining that the replica resource does not pose a security risk to the computing device (Farber, see inter alia, Figure 28).

23.   As per claim 47, Farber teaches the claimed invention as described above (see claim 45). Farber further teaches redirecting the request to indicate that the replica resource is not available if determining that the replica resource poses a security risk to the computing device (Farber, see inter alia, Figure 28).

24.   As per claim 48, Farber teaches the claimed invention as described above (see claim 45). Farber further teaches replacing the cached descriptor with the second descriptor if the formulated descriptor and the second descriptor are equivalent (Farber, see inter alia, Column 25 Line 57 – 61 and Column 37 Line 13 – 17).

25.   As per claim 49, Farber teaches the claimed invention as described above (see claim 45). Farber further teaches replacing the replica resource with a copy of the original resource if the formulated descriptor and the cached descriptor are not equivalent, and if the formulated descriptor and the second descriptor are not equivalent (Farber, see inter alia, Column 37 Line 51 – 52 and Column 31 Line 31 – 32).

26.   As per claim 50, Farber teaches the claimed invention as described above (see claim 45). Farber further teaches replacing the cached descriptor with the second descriptor if the formulated descriptor and the cached descriptor are not equivalent, and if the formulated descriptor and the second descriptor are not equivalent (Farber, see inter alia, Column 37 Line 33 – 35).

27.   As per claim 51, Farber teaches the claimed invention as described above (see claim 45). Farber further teaches formulating the cached descriptor when the original resource is replicated to create the replica resource (Farber, see inter alia, Column 37 Line 33 – 35).

28.   As per claim 52, Farber teaches the claimed invention as described above (see claim 45). Farber further teaches formulating the cached descriptor when the replica resource is initially requested (Farber, see inter alia, Column 14 Line 26 – 30 and Column 3 Line 56 – 57).

29.   As per claim 53, Farber teaches the claimed invention as described above (see claim 45). Farber further teaches determining whether the request will pose a security risk (Farber, see inter alia, Column 34 Line 45 – 50 and Column 31 Line 30).

30.   As per claim 54, Farber teaches the claimed invention as described above (see claim 45). Farber further teaches determining whether the request will pose a security risk; and redirecting the request to indicate that the replica resource is not available if determining that the request poses a security risk to the computing device (Farber, see inter alia, Figure 28).

31.   As per claim 71, Farber discloses a method determining whether an operating system can access a resource without a security risk, the method comprising:

a.   formulating a descriptor corresponding to the resource (Farber, see inter alia,

Column 31 Line 27 – 30);

b.   retrieving a cached descriptor corresponding to the resource, the cached

descriptor stored remotely (Farber, see inter alia, Column 23 Line 15 – 2 and Column

23 Line 41 – 43);

c.   comparing the formulated descriptor with the cached descriptor (Farber, see inter

alia, Column 37 Line 36 – 42); and

d.   determining that the resource is not a security risk if the formulated descriptor

and the cached descriptor are equivalent (Farber, see inter alia, Column 37 Line 12 –

13 and Figure 28).

32.   As per claim 72, Farber teaches the claimed invention as described above (see

claim 71). Farber further teaches allowing the operating system to access the resource

if said determining that the resource is not a security risk (Farber, see inter alia, Figure

28).

33.   As per claim 73, Farber teaches the claimed invention as described above (see

claim 71). Farber further teaches formulating the cached descriptor when the resource

is created (Farber, see inter alia, Column 37 Line 4 – 17 and Column 17 Line 31 – 43).

34.   As per claim 74, Farber teaches the claimed invention as described above (see

claim 71). Farber further teaches formulating the cached descriptor when the resource

is initially requested (Farber, see inter alia, Column 37 Line 4 – 17).

35.   Claim 14 – 19 are rejected under 35 U.S.C. 102(e) as being anticipated by

Brothers (Publication Number: US 2002/0083178), hereinafter referred to as Brothers.

36.   As per claim 14, Brothers discloses a network server comprising:

a.   a server component to receive a request for a resource maintained on the

network server and, in response to the request, implement security policies to prevent

unauthorized access to the resource; and a security component that is registerable with

the server component during run-time to determine whether the request will pose a

security risk to the network server (Brothers, see inter alia, Page 12 Parag. 0109 Line

10 – 13 and Figure 8).

37.   As per claim 15, Brothers teaches the claimed invention as described above (see

claim 14). Brothers further teach if the security component determines that the request

will pose a security risk, the security component redirects the request to indicate; that

the resource is not available (Brothers, see inter alia, Page 12 Parag. 0109 Line 17 – 21

and Figure 8).

38.   As per claim 16, Brothers teaches the claimed invention as described above (see

claim 14). Brothers further teach the request designates a resource locator having a

resource path, the resource path identifying a location of the resource, and wherein the

security component determines that the request is not a security risk if the resource

path does not exceed a maximum number of characters (Brothers, see inter alia, Page

4 Parag. 0022 Line 1 – 3, Page 16 Parag. 0170 Line 6 – 9 and Figure 13B).

39.   As per claim 17, Brothers teaches the claimed invention as described above (see

claim 14). Brothers further teach the request designates a resource locator having a

plurality of arguments, and wherein the security component determines that the request

is not a security risk if individual arguments do not exceed a maximum number of

characters, and if a total number of characters defining all of the arguments do not

exceed a maximum number of characters (Brothers, see inter alia, Page 16 Parag.

0170 Line 6 – 9 and Figure 13B).

40.   As per claim 18, Brothers teaches the claimed invention as described above (see

claim 14). Brothers further teach the request designates a resource locator having a

resource identifier, and wherein the security component determines that the request is

not a security risk if the resource identifier has a valid file extension (Brothers, see inter

alia, Page 16 Parag. 0170 Line 9 – 10 and Figure 13B).

41.   As per claim 19, Brothers teaches the claimed invention as described above (see

claim 14). Brothers further teach:

a.   the request designates a resource locator having a resource path and one or

more arguments, the resource path identifying a location of the resource and the

resource path having a resource identifier (Brothers, see inter alia, Page 4 Parag. 0022

Line 1 – 3);

b.   the security component determines that the request is not a security risk if: the

resource path does not exceed a maximum number of characters; individual arguments

do not exceed a maximum number of characters; a total number of characters defining

all of the arguments do not exceed a maximum number of characters; and the resource

identifier has a valid file extension (Brothers, see inter alia, Page 16 Parag. 0170 and

Figure 13B).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

42.   Claim 9 – 13, 55 – 60 and 75 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Farber (Patent Number: US 6415280 B1), hereinafter referred to as

Farber (as applied to claim 1 and 8 above), in view of Brothers (Publication Number: US

2002/0083178), hereinafter referred to as Brothers.

43.   As per claim 9, Farber teaches the claimed invention of resource integrity

validation in regard to security purpose to guard against virus, malicious changes or

other problems in a client-server and server-server network environment (see claim 8).

Farber does not expressly teach the request designates a resource locator. Brothers

further disclose the request designates a resource locator (Brothers, see inter alia, Page

8 Parag. 0087 Line 1 – 3).

44.   It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to combine the teaching of Brothers within the system of Farber

because Brothers discloses the resource access in the distributed network environment

through a secure universal resource locator (URL) in accordance with the emerging

internet-based web applications.

45.   As per claim 10, Farber teaches the claimed invention as described above (see

claim 8). Brothers further teach the request designates a resource locator having a

resource path, the resource path identifying a location of the replica resource, and

wherein the security component determines that the request is not a security risk if the

resource path does not exceed a maximum number of characters (Brothers, see inter

alia, Page 4 Parag. 0022 Line 1 – 3, Page 16 Parag. 0170 Line 6 – 9 and Figure 13B).

Same rational for combination applies here as above in rejecting claim 9.

46.   As per claim 11, Farber teaches the claimed invention as described above (see

claim 8). Brothers further teach the request designates a resource locator having a

plurality of arguments, and wherein the security component determines that the request

is not a security risk if individual arguments do not exceed a maximum number of

characters, and if a total number of characters defining all of the arguments do not

exceed a maximum number of characters (Brothers, see inter alia, Page 16 Parag.

0170 Line 6 – 9 and Figure 13B). Same rational for combination applies here as above

in rejecting claim 9.

47.   As per claim 12, Farber teaches the claimed invention as described above (see

claim 8). Brothers further teach the request designates a resource locator having a

resource identifier, and wherein the security component determines that the request is

not a security risk if the resource identifier has a valid file extension (Brothers, see inter

alia, Page 16 Parag. 0170 Line 9 – 10 and Figure 13B). Same rational for combination

applies here as above in rejecting claim 9.

48.   As per claim 13, Farber teaches the claimed invention as described above (see

claim 1). Brothers further teach:

a.   the request designates a resource locator having a resource path and one or

more arguments, the resource path identifying a location of the replica resource and the

resource path having a resource identifier (Brothers, see inter alia, Page 4 Parag. 0022

Line 1 – 3 and Figure 2D);

b.   the security component is configured to determine whether the request will pose

a security risk to the second device; the security component determines that the request

is not a security risk if: the resource path does not exceed a maximum number of

characters; individual arguments do not exceed a maximum number of characters; a

total number of characters defining all of the arguments do not exceed a maximum

number of characters; and the resource identifier has a valid file extension (Brothers,

see inter alia, Page 16 Parag. 0170 Line 9 – 10 and Figure 13B).

49.   Same rational for combination applies here as above in rejecting claim 9.

50.   As per claim 55, Farber teaches the claimed invention of resource integrity

validation in regard to security purpose to guard against virus, malicious changes or

other problems in a client-server and server-server network environment (see claim 45).

Farber does not expressly teach uniform resource locator (URL) related subject matters.

Brothers further disclose the request designates a resource locator having a resource

path, the resource path identifying a location of the replica resource, and the method

further comprising determining that the request does not pose a security risk if the

resource path does not exceed a maximum number of characters (Brothers, see inter

alia, Page 4 Parag. 0022 Line 1 – 3, Page 16 Parag. 0170 Line 6 – 9 and Figure 13B).

51.   It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to combine the teaching of Brothers within the system of Farber

because Brothers discloses the resource access in the distributed network environment

through a secure universal resource locator (URL) in accordance with the emerging

internet-based web applications.

52.   As per claim 56, Farber teaches the claimed invention as described above (see

claim 55). Brothers further teach the request designates a resource locator having a

plurality of arguments, and the method further comprising determining that the request

does not pose a security risk if individual arguments do not exceed a maximum number

of characters, and if a total number of characters defining all of the arguments do not

exceed a maximum number of characters (Brothers, see inter alia, Page 16 Parag.

0170 Line 6 – 9 and Figure 13B). Same rational for combination applies here as above

in rejecting the claim 55.

53.   As per claim 57, Farber teaches the claimed invention as described above (see claim 55). Brothers further teach the request designates a resource locator having a resource identifier, and the method further comprising determining that the request does not pose a security risk if the resource identifier has a valid file extension (Brothers, see inter alia, Page 16 Parag. 0170 Line 9 – 10 and Figure 13B). Same rational for combination applies here as above in rejecting the claim 55.

54.   As per claim 58, Farber teaches the claimed invention as described above (see claim 55). Brothers further teach:

55.   a.   the request designates a resource locator having a resource path and one or more arguments, the resource path identifying a location of the replica resource and the resource path having a resource identifier (Brothers, see inter alia, Page 4 Parag. 0022 Line 1 – 3 and Figure 2D);

b.   the method further comprising determining that the request does not pose a security risk if: the resource path does not exceed a maximum number of characters; individual arguments do not exceed a maximum number of characters; a total number of characters defining all of the arguments do not exceed a maximum number of characters; and the resource identifier has a valid file extension (Brothers, see inter alia, Page 16 Parag. 0170 Line 9 – 10 and Figure 13B).

56.   Same rational for combination applies here as above in rejecting the claim 55.

57.   As per claim 59, Farber teaches the claimed invention as described above (see claim 45). The claim recites computer-readable medium comprising computer executable instructions that, when executed, direct a computing system to perform the

method of claim 45. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to select a computing device to serve this purpose.

58.   As per claim 60, Farber teaches the claimed invention as described above (see claim 58). The claim recites computer-readable medium comprising computer executable instructions that, when executed, direct a computing system to perform the method of claim 58. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to select a computing device to serve this purpose.

59.   As per claim 75, Farber teaches the claimed invention as described above (see claim 71). The claim recites computer-readable medium comprising computer executable instructions that, when executed, direct a computing system to perform the method of claim 71. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to select a computing device to serve this purpose.

60.   Claim 25 – 32, 37 – 44 and 61 – 70 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Brothers (Publication Number: US 2002/0083178), hereinafter

referred to as Brothers, in view of Farber (Patent Number: US 6415280 B1), hereinafter

referred to as Farber.

61.   As per claim 25, Brothers teach:

a.   an Internet server to receive a request for a resource maintained on the network

server and, in response to the request, implement security policies to prevent

unauthorized access to the resource (Brothers, see inter alia, Page 12 Parag. 0109 Line

10 – 13 and Figure 8);

b.   a security component that is registerable with the Internet server during run-time,

the security component having: a validation component to determine whether the

request will pose a security risk to the network server (Brothers, see inter alia, Page 16

Parag. 0170).

62.   Brothers do not teach:

c.   an integrity verification component to determine whether the resource will pose a

security risk to the network server upon receipt of the request.

63.   Farber teaches an integrity verification component to determine whether the

resource will pose a security risk to the network server upon receipt of the request

(Farber, see inter alia, Column 34 Line 45 – 50).

64.   It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to combine the teaching of Farber within the system of Brothers

because Farber discloses resource integrity validation in regard to security purpose to guard against virus, malicious changes or other problems in a client-server and server-server network environment as part of emerging internet-based applications.

65.   As per claim 37, Brothers teach a validation component to determine whether a request for a resource poses a security risk (Brothers, see inter alia, Page 16 Parag. 0170).

66.   Brothers do not teach an integrity verification component to determine whether the resource poses a security risk.

67.   Farber teaches an integrity verification component to determine whether the resource poses a security risk (Farber, see inter alia, Column 34 Line 45 – 50).

68.   It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Farber within the system of Brothers because Farber discloses resource integrity validation in regard to security purpose to guard against virus, malicious changes or other problems in a client-server and server-server network environment as part of emerging internet-based applications.

69.   As per claims 26 and 38, Brothers-Farber teaches the claimed invention as described above (see claim 25 and 37, respectively). Brothers further teach the request designates a resource locator having a resource path, the resource path identifying a location of the resource, and wherein the validation component determines that the request is not a security risk if the resource path does not exceed a maximum number of characters ((Brothers, see inter alia, Page 4 Parag. 0022 Line 1 – 3, Page 16 Parag.

0170 Line 6 – 9 and Figure 13B). Same rational for combination applies here as above in rejecting claim 25 and 37.

70.   As per claims 27 and 39, Brothers-Farber teaches the claimed invention as described above (see claim 25 and 37, respectively). Brothers further teach the request designates a resource locator having a plurality of arguments, and wherein the validation component determines that the request is not a security risk if individual arguments do not exceed a maximum number of characters, and if a total number of characters defining all of the arguments do not exceed a maximum number of characters (Brothers, see inter alia, Page 16 Parag. 0170 Line 6 – 9 and Figure 13B). Same rational for combination applies here as above in rejecting claim 25 and 37.

71.   As per claims 28 and 40, Brothers-Farber teaches the claimed invention as described above (see claim 25 and 37, respectively). Brothers further teach the request designates a resource locator having a resource identifier, and wherein the validation component determines that the request is not a security risk if the resource identifier has a valid file extension (Brothers, see inter alia, Page 16 Parag. 0170 Line 9 – 10 and Figure 13B). Same rational for combination applies here as above in rejecting claim 25 and 37.

72.   As per claims 29 and 41, Brothers-Farber teaches the claimed invention as described above (see claim 25 and 37, respectively). Brothers further teach:

a.   the request designates a resource locator having a resource path and one or more arguments, the resource path identifying a location of the resource and the

resource path having a resource identifier (Brothers, see inter alia, Page 4 Parag. 0022

Line 1 – 3 and Figure 2D); and

b.   the validation component determines that the request is not a security risk if the

resource path does not exceed a maximum number of characters; individual arguments

do not exceed a maximum number of characters; a total number of characters defining

all of the arguments do not exceed a maximum number of characters; and the resource

identifier has a valid file extension (Brothers, see inter alia, Page 16 Parag. 0170 and

Figure 13B).

73.   Same rational for combination applies here as above in rejecting the claim 25

and 37.

74.   As per claims 30 and 42, Brothers-Farber teaches the claimed invention as

described above (see claim 25 and 37, respectively). Farber further teach:

75.   a.   formulates a descriptor corresponding to the resource; compares the

formulated descriptor with a cached descriptor, the cached descriptor corresponding to

the resource and formulated when the resource is initially requested (Farber: inter alia,

Column 31 Line 27 – 30, Column 37 Line 36 – 42, Column 14 Line 26 – 30 and Column

3 Line 56 – 57); and

76.   b.   determines that the resource is not a security risk if the formulated

descriptor and the cached descriptor are equivalent (Farber: inter alia, Column 37 Line

12 – 13 and Figure 28).

77.   Same rational for combination applies here as above in rejecting the claim 25

and 37.

78.   As per claims 31 and 43, Brothers-Farber teaches the claimed invention as

described above (see claim 25 and 37, respectively). Farber further teach:

a.   formulates a descriptor corresponding to the resource; compares the formulated

descriptor with a cached descriptor, the cached descriptor corresponding to the

resource and formulated when the resource is initially requested (Farber: inter alia,

Column 31 Line 27 – 30, Column 37 Line 36 – 42, and Column 14 Line 26 – 30);

b.   if the formulated descriptor and the cached descriptor are not equivalent,

formulates a second descriptor corresponding to an original resource maintained on a

file server remotely located from the network server, the resource being replicated from

the original resource (Farber: inter alia, Column 3 Line 35 – 38 and Column 31 Line 31

– 33);

c.   compares the formulated descriptor with the second descriptor; and determines

that the resource is not a security risk if the formulated descriptor and the second

descriptor are equivalent (Farber: inter alia, Column 37 Line 13 – 14 and Figure 28).

79.   Same rational for combination applies here as above in rejecting the claim 25

and 37.

80.   As per claims 32 and 44, Brothers-Farber teaches the claimed invention as

described above (see claim 25 and 37, respectively). Farber further teach:

a.   formulates a descriptor corresponding to the resource; compares the formulated

descriptor with a cached descriptor, the cached descriptor corresponding to the

resource and formulated when the resource is initially requested (Farber: inter alia,

Column 31 Line 27 – 30, Column 37 Line 36 – 42, and Column 14 Line 26 – 30);

b.   if the formulated descriptor and the cached descriptor are not equivalent,

formulates a second descriptor corresponding to an original resource maintained on a

file server remotely located from the network server, the resource being replicated from

the original resource (Farber: inter alia, Column 3 Line 35 – 38 and Column 31 Line 31

– 33);

c.   compares the formulated descriptor with the second descriptor; if the formulated

descriptor and the second descriptor are not equivalent, initiates that the resource

stored on the network server be replaced with a copy of the original resource

maintained on the file server (Farber: inter alia, Column 37 Line 51 – 52 and Column 31

Line 31 – 32); and

d.   initiates that the cached descriptor be replaced with the second descriptor

(Farber: inter alia, Column 37 Line 33 – 35).

81.   Same rational for combination applies here as above in rejecting the claim 25

and 37.

82.   As per claim 61, Brothers teach:

a.   receiving a request for a resource (Brothers, see inter alia, Figure 2D);

b.   implementing security policies to prevent unauthorized access to the resource

(Brothers, see inter alia, Figure 8);

c.   determining whether the request will pose a security risk (Brothers, see inter alia,

Page 16 Parag. 0171);

83.   Brothers do not teach determining whether the resource will pose a security risk

if allowing the request.

84.   Farber teaches determining whether the resource will pose a security risk if

allowing the request (Farber, see inter alia, Column 34 Line 45 – 50).

85.   It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to combine the teaching of Farber within the system of Brothers

because Farber discloses resource integrity validation in regard to security purpose to

guard against virus, malicious changes or other problems in a client-server and server-

server network environment as part of emerging internet-based applications.

86.   As per claim 62, Brothers-Farber teaches the claimed invention as described

above (see claim 61).   The claim recites allowing the request for the resource if

determining that the request does not pose a security risk and if determining that the

resource does not pose a security risk. Brothers further teach the request can't be

allowed if determining the request poses a security risk (Brothers, see inter alia, Figure

8) and subsequently Farber also teaches the access to the resource can't be allowed if

determining the resource poses a security risk. This is because the True Name (i.e.

unique resource ID) has been changed (Farber, see inter alia, Figure 28). Same

rational for combination applies here as above in rejecting the claim 61.

87.   As per claim 63, Brothers-Farber teaches the claimed invention as described

above (see claim 61).   Brothers further teach the request designates a resource locator

having a resource path, the resource path identifying a location of the resource, and the method further comprising determining that the request does not pose a security risk if the resource path does not exceed a maximum number of characters (Brothers, see inter alia, Page 4 Parag. 0022 Line 1 – 3, Page 16 Parag. 0170 Line 6 – 9 and Figure 13B). Same rational for combination applies here as above in rejecting the claim 61.

88.   As per claim 64, Brothers-Farber teaches the claimed invention as described above (see claim 61). Brothers further teach the request designates a resource locator having a plurality of arguments, and the method further comprising determining that the request does not pose a security risk if individual arguments do not exceed a maximum number of characters, and if a total number of characters defining all of the arguments do not exceed a maximum number of characters (Brothers, see inter alia, Page 16 Parag. 0170 Line 6 – 9 and Figure 13B). Same rational for combination applies here as above in rejecting the claim 61.

89.   As per claim 65, Brothers-Farber teaches the claimed invention as described above (see claim 61). Brothers further teach the request designates a resource locator having a resource identifier, and the method further comprising determining that the request does not pose a security risk if the resource identifier has a valid file extension (Brothers, see inter alia, Page 16 Parag. 0170 Line 9 – 10 and Figure 13B). Same rational for combination applies here as above in rejecting the claim 61.

90.   As per claim 66, Brothers-Farber teaches the claimed invention as described above (see claim 61). Farber further teaches:

a.   formulating a descriptor corresponding to the resource; comparing the formulated

descriptor with a cached descriptor corresponding to the resource and formulated when

the resource is initially requested (Farber: inter alia, Column 31 Line 27 – 30, Column

37 Line 36 – 42, Column 14 Line 26 – 30 and Column 3 Line 56 – 57; and

91.   b.   determining that the resource does not pose a security risk if the

formulated descriptor and the cached descriptor are equivalent (Farber: inter alia,

Column 37 Line 12 – 13 and Figure 28).

92.   Same rational for combination applies here as above in rejecting the claim 61.

93.   As per claim 67, Brothers-Farber teaches the claimed invention as described

above (see claim 61).   Farber further teaches:

a.   formulating a descriptor corresponding to the resource; comparing the formulated

descriptor with a cached descriptor corresponding to the resource and formulated when

the resource is initially requested (Farber: inter alia, Column 31 Line 27 – 30, Column

37 Line 36 – 42, and Column 14 Line 26 – 30);

b.   determining that the resource does not pose a security risk if the formulated

descriptor and the cached descriptor are equivalent; if the formulated descriptor and the

cached descriptor are not equivalent, formulating a second descriptor corresponding to

an original resource remotely located, the resource replicated from the original source

(Farber: inter alia, Column 3 Line 35 – 38 and Column 31 Line 31 – 33);

c.   comparing the formulated descriptor with the second descriptor; and determining

that the resource does not pose a security risk if the formulated descriptor and the

second descriptor are equivalent (Farber: inter alia, Column 37 Line 13 – 14 and Figure

28).

94.   Same rational for combination applies here as above in rejecting the claim 61.

95.   As per claim 68, Brothers-Farber teaches the claimed invention as described

above (see claim 61).   Farber further teaches:

96.   formulating a descriptor corresponding to the resource; comparing the formulated

descriptor with a cached descriptor corresponding to the resource and formulated when

the resource is initially requested (Farber: inter alia, Column 31 Line 27 – 30, Column

37 Line 36 – 42, Column 14 Line 26 – 30 and Column 3 Line 56 – 57);

b.   determining that the resource does not pose a security risk if the formulated

descriptor and the cached descriptor are equivalent (Farber, see inter alia, Column 37

Line 12 – 13 and Figure 28);

c.   if the formulated descriptor and the cached descriptor are not equivalent,

formulating a second descriptor corresponding to an original resource remotely located,

the resource replicated from the original resource (Farber, see inter alia, Column 3 Line

35 – 38 and Column 31 Line 31 – 33);

d.   comparing the formulated descriptor with the second descriptor; and determining

that the resource does not pose a security risk if the formulated descriptor and the

second descriptor are equivalent (Farber, see inter alia, Column 37 Line 13 – 14 and

Figure 28);

e.   if the formulated descriptor and the second descriptor are not equivalent,

replacing the resource with a copy of the original resource and replacing the cached

descriptor with the second descriptor (Farber, see inter alia, Column 37 Line 51 – 52, Column 31 Line 31 – 32 and Column 37 Line 33 – 35).

97.   Same rational for combination applies here as above in rejecting the claim 61.

98.   As per claim 69, Brothers-Farber teaches the claimed invention as described above (see claim 61). The claim recites computer-readable medium comprising computer executable instructions that, when executed, direct a computing system to perform the method of claim 61. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to select a computing device to serve this purpose.

99.   As per claim 70, Brothers-Farber teaches the claimed invention as described above (see claim 68). The claim recites computer-readable medium comprising computer executable instructions that, when executed, direct a computing system to perform the method of claim 68. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to select a computing device to serve this purpose.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Longbit Chai whose telephone number is 703-305-0710. The examiner can normally be reached on Monday-Friday 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ayaz R Sheikh can be reached on 703-305-9648. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

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Longbit Chai
Examiner
Art Unit 2131

LBC

AYAZ SHEIKH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100